

SONY

White paper

August 2015



Xperia™ C5 Ultra
E5553/E5506

Purpose of this document

Sony Mobile Communications product White papers are intended to give an overview of a product and provide details in relevant areas of technology.

NOTE: All illustrations, screen images, and elements are for reference only and subject to change at any time without prior notice.

Document history

Version		
August 2015	First released version	Version 1

Sony Mobile Developer World

For the latest technical documentation and development tools, go to www.sonymobile.com/developer.

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Product overview

13- megapixel twin cameras

The Xperia™ C5 Ultra sports front and rear facing 13-megapixel cameras. The Xperia™ C5 Ultra uses Sony's Exmor RS mobile sensor and HDR technology to provide sharp and clear images when taking photos or selfies using your smartphone. When used with Superior Auto mode, both the front and rear facing cameras can capture crisp photos in a variety of scenes and lighting conditions.

Selfie camera that performs in any light

The Xperia™ C5 Ultra's front facing camera uses a soft LED Selfie Flash for illuminating scenes when you're taking photos of yourself or a group of people with you. Unlike the smartphone flash found on other devices, the flash on the Xperia™ C5 Ultra is square instead of round so it lights up more of the frame when you're taking a photograph. The flash also automatically adjusts to the lighting conditions to provide the appropriate illumination for a particular scene. The front facing camera also has a wide 22 mm lens with an 88-degree field of view that can handle photos involving a group of people.

An almost borderless 6" Full HD display

With a wafer-thin bezel, the Xperia™ C5 Ultra's large 6" display is almost all screen. The 6" screen is reinforced by an aluminium frame with a slight curve for a comfortable feel. In addition, the Xperia™ C5 Ultra uses Mobile BRAVIA® Engine 2 technology to produce crisp images, accurate colours and enhanced contrast.

ClearAudio+ Sony Audio technology

The Xperia™ C5 Ultra uses ClearAudio+ technology to reproduce sound and enhance audio playback. With Clear Stereo, Clear Bass and Clear Phase, your tracks are stripped of distortion and noise. Meanwhile, the xLOUD enhancement engine delivers your music with a deeper, richer sound and powerful bass.

Product specifications

Operating system	Google™ Android™ 5.0 (Lollipop)
Processor	1.7 GHz MediaTek MT6752 Octa-core
GPU	ARM MaliT760-MP2 700MHz
Size	164.2 x 79.6 x 8.2 mm
Weight	187 grams
Available colours	Black White Mint
SIM card	Nano SIM
Main screen	
Colours	16M
Resolution	Full HD 1920x1080 pixels
Size (diagonal)	6.0 inches
Scratch-resistant	Yes (Front with minimum pencil hardness > 9H)
Input mechanisms	
Text input	On-screen QWERTY keyboard, 12-key input, Handwriting
Touch screen	Capacitive
Multi-touch capability	10 fingers
Memory	
RAM	2 GB DDR3
Flash memory	Up to 16 GB*
Internal Storage	Up to approximately 9.5 GB*
Expansion slot	microSD™ card, up to 200 GB
Memory card speed class	Class 10**
Memory card UHS speed class	Class 1**
Main Camera	
Camera resolution	13 MP
Exmor	Yes – Exmor RS™
Digital zoom	x4
Video recording	Full HD 1080p 30fps
Auto Focus	Yes

Technologies in detail

The information presented in this section is a general overview of the technology incorporated into the product. However, hardware and software levels of compliance to standards and specifications vary between products and markets. For more information, contact Sony Mobile Developer World or the relevant Sony representative.

Accessibility and Usability

Talkback*	Yes, default is “off”
Captions*	Yes, default is “off”
Magnifications gestures*	Yes, default is “off”
Large Text*	Yes, default is “Not checked”
High Contrast Text*	Yes, default is “Not checked”
Power button ends call*	Yes, default is “Not checked”
Auto-rotation*	Yes, default is “checked”
Speak Passwords*	Yes, default is “Not checked”
Accessibility Shortcuts*	Yes, default is “off”
Text – to – Speech*	Yes
Touch and hold delay*	Yes, default is “Short”
Color Inversion*	Yes, default is “off”
Color correction*	Yes, default is “off”

** This feature is subject to change in future releases of Google™ Android™.*

Device-to-device communications (local)

Bluetooth® wireless technology

Bluetooth® profiles supported	Advanced Audio Distribution Profile v1.2 Audio/Video Control Transport Protocol Profiles v1.4 Audio/Visual Distribution Profile v1.3 Audio/Video Remote Control Profile v1.3 Generic Access Profile General Audio/Video Distribution Profile v1.2 Generic Object Exchange Profile v1.1 Health Device Profile v1.0 Hands-Free Profile v1.6 Human Interface Device Profile v1.0 Headset Profile v1.2 Message Access Profile v1.0 Object Push Profile v1.1 Personal Area Networking Profile v1.0 PhoneBook Access Profile v1.1 SIM Access Profile v1.1 Service Discovery Application Profile v(LocDev) Serial Port Profile v(DevA DevB) GATT Client GATT Server Find Me Profile v1.0 HID over GATT Profile v1.0 Proximity Profile v1.0 Bluetooth proprietary audio codec compression algorithms
Core version and supported core features	BT 4.1 + HS
Other supported features	aptX® CD quality audio streaming over a Bluetooth® connection
Connectable devices	Products that support at least one of the Bluetooth® profiles listed above. Bluetooth® 4.1 accessories generally require installation of a supporting application.

More information:

www.sonymobile.com/developer

www.bluetooth.com

Wi-Fi®

Supported standards	IEEE 802.11a/b/g/n and Wi-Fi® Wi-Fi Direct®, Wi-Fi Protected Setup, Wi-Fi CERTIFIED Miracast™
Connectable devices	Wi-Fi® access points Wi-Fi Direct™ compatible devices
Frequency band	2.4 GHz / 5 GHz
Data transfer rate	Up to 150 Mbit/s
Security	Open Authentication Shared Authentication EAP-SIM EAP-AKA EAP-TLS EAP-TTLS/MSCHAPv2 PEAPv0/EAP-MSCHAPv2 PEAPv1/EAP-GTC WPA Personal and WPA2 Personal WPA Enterprise and WPA2 Enterprise
Encryption	WEP 64 bit, WEP 128 bit, TKIP and CCMP (AES)
Power save	WMM-UAPSD
QoS	WMM

Note 3:

For a developer, it is important to note that from a programming point of view the location names used to refer to the different memory areas described in Note 1 are still valid, i.e., the area used for applications (“/data”) is still present, as is the area used for content (“/sdcard”).

In reality, “sdcard” is a “symbolic link” to “/data/media”. However, from inside an Android application, “/sdcard” can still be used. For example, you can use “sdcard/DCIM/100Android” to find all camera images. The continued use of “/sdcard” to access the content area ensures compatibility across different products and Android releases in this regard.

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